SC/QC/110V-Y1/2021-22/C1 Date: 21-02-2022

1. TEST REPORT ON CEMENT:

Sub: Testing of 53 Grade Cement Sample (IS 12269-1987).
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01).}
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

PHYSICAL TESTS ON CEMENT

Grade * : 53,
Type * : O.P.C

TABLE 1.1:

SL No	Name of Test	Test Results	Requirements as per IS 8112-1989
1	Initial setting time	162 min	Shall not be less than 30 min
2	Final setting time	275 min	Shall not be more than 600 min
3	Fineness (by dry sieving on IS 90 micron sieve)	2.19%	Not to exceed 10.0%
4	Soundness test(by Le-Chatelier's method)	2.06mm	Shall not be more than 10 mm
5	Compressive strength a) 3 days (average of three results)	28.75 N/Sq mm	Shall not be less than 27 N/Sqmm

The result of the materials tested meets the standards and hence can be used for the work.
Nagenahalli Layout

AE-02

SILICON CONSULTING ENGINEERS K.R

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SC/QC/110V-Y1/2021-22/PCC1 Date: 21-02-2022

1. TESTING OF COARSE AND FINE AGGREGATES:

Sub: Testing of Coarse and Fine aggregates to be used for bed concrete.
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01).}
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

1. COARSE AGGRGATES TABLE - SIEVE ANALYSIS:

IS Sieve Size, mm	Percentage passing	Requirements as per IS 383-1970 (Reaffirmed on 2007) % Passing	
	40 mm Sample	Single size	Graded
40mm	100.00	85-100	90 – 100
20mm	66.45	0 -20	30- 70
10mm	31.80	0 -5	10- 35
4.75mm	4.15	------	0- 5

AE-2

2. FINE AGGREGATES TABLE - SIEVE ANALYSIS:

IS Sieve Size, mm	Percentage Passing	Specification as Per IS: 383-1970(Reaffirmed 2002) Percentage Passing			Remarks
		Zone-I	Zone-II	Zone -III	
04.75	95.30	90-100	90-100	90-100	The Sample Conforms to Grading **Zone-II**
02.36	81.25	60-95	75-100	85-100	
01.18	73.05	30-70	55-90	75-100	
600.mic	46.80	15-34	35-59	60-79	
300.mic	23.15	5-20	8-30	12-40	
150.mic	5.75	0-10	0-10	0-10	

The result of the materials tested meets the standards and hence can be used for the work.
Nagenahalli Layout

AE-02

SILICON CONSULTING ENGINEERS

SC/QC/110V-Y1/2021-22/C2 Date: 21-02-2022

1. TEST REPORT ON CEMENT:

Sub: Testing of 53 Grade Cement Sample (IS 12269-1987).
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01).}
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

PHYSICAL TESTS ON CEMENT

Grade * : 53,
Type * AE-2 : O.P.C

TABLE 1.1: A.E.E

SL No	Name of Test	Test Results	Requirements as per IS 8112-1989
1	Initial setting time	155 min	Shall not be less than 30 min
2	Final setting time	265 min	Shall not be more than 600 min
3	Fineness (by dry sieving on IS 90 micron sieve)	2.14 %	Not to exceed 10.0%
4	Soundness test(by Le-Chatelier's method)	2.07 mm	Shall not be more than 10 mm
5	Compressive strength b) 3 days (average of three results)	28.55 N/Sq mm	Shall not be less than 27 N/Sqmm

The result of the materials tested meets the standards and hence can be used for the work.
Main Rd @dead end after 3rd cross

AE-02

SILICON CONSULTING ENGINEERS K.R

Page No. 1/1,

SC/QC/110V-Y1/2021-22/PCC4 Date: 23-02-2022

1. TESTING OF COARSE AND FINE AGGREGATES:

Sub: Testing of Coarse and Fine aggregates to be used for bed concrete.
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01).}
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

1. COARSE AGGRGATES TABLE - SIEVE ANALYSIS:

IS Sieve Size, mm	Percentage passing	Requirements as per IS 383-1970 (Reaffirmed on 2007) % Passing	
	40 mm Sample	Single size	Graded
40mm	100.00	85-100	90 – 100
20mm	64.20	0 -20	30- 70
10mm	30.55	0 -5	10- 35
4.75mm	4.10	------	0- 5

2. FINE AGGREGATES TABLE - SIEVE ANALYSIS:

IS Sieve Size, mm	Percentage Passing	Specification as Per IS: 383-1970(Reaffirmed 2002) Percentage Passing			Remarks
		Zone-I	Zone-II	Zone -III	
04.75	98.30	90-100	90-100	90-100	The Sample Conforms to Grading **Zone-II**
02.36	81.25	60-95	75-100	85-100	
01.18	73.50	30-70	55-90	75-100	
600.mic	46.35	15-34	35-59	60-79	
300.mic	24.10	5-20	8-30	12-40	
150.mic	6.80	0-10	0-10	0-10	

The result of the materials tested meets the standards and hence can be used for the work.
6th Main 6th Cross Rd

AE-02

SILICON CONSULTING ENGINEERS

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SC/QC/110V-Y1/2021-22/PCC5 **Date: 23-02-2022**

1. TESTING OF COARSE AND FINE AGGREGATES:

Sub: Testing of Coarse and Fine aggregates to be used for bed concrete.
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01).}
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

1. COARSE AGGRGATES TABLE - SIEVE ANALYSIS:

IS Sieve Size, mm	Percentage passing	Requirements as per IS 383-1970 (Reaffirmed on 2007) % Passing	
	40 mm Sample	Single size	Graded
40mm	100.00	85-100	90 – 100
20mm	67.45	0 -20	30- 70
10mm	31.80	0 -5	10- 35
4.75mm	4.05	------	0- 5

AE-2

2. FINE AGGREGATES TABLE - SIEVE ANALYSIS:

IS Sieve Size, mm	Percentage Passing	Specification as Per IS: 383-1970(Reaffirmed 2002) Percentage Passing			Remarks
		Zone-I	Zone-II	Zone -III	
04.75	97.35	90-100	90-100	90-100	The Sample Conforms to Grading **Zone-II**
02.36	82.10	60-95	75-100	85-100	
01.18	73.80	30-70	55-90	75-100	
600.mic	46.35	15-34	35-59	60-79	
300.mic	23.10	5-20	8-30	12-40	
150.mic	6.25	0-10	0-10	0-10	

The result of the materials tested meets the standards and hence can be used for the work.
6th Main 6th Cross Dead End

AE-2

SILICON CONSULTING ENGINEERS

Page No. 1/1,

SC/QC/110V-Y1/2021-22/C8 Date: 02-03-2022

1. TEST REPORT ON CEMENT:

Sub: Testing of 53 Grade Cement Sample (IS 12269-1987).
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01).}
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

PHYSICAL TESTS ON CEMENT

Grade * : 53,
Type * : O.P.C

TABLE 1i1:

SL No	Name of Test	Test Results	Requirements as per IS 8112-1989
1	Initial setting time	153 min	Shall not be less than 30 min
2	Final setting time	275 min	Shall not be more than 600 min
3	Fineness (by dry sieving on IS 90 micron sieve)	2.13 %	Not to exceed 10.0%
4	Soundness test(by Le-Chatelier's method)	2.06 mm	Shall not be more than 10 mm
5	Compressive strength h) 3 days (average of three results)	28.55 N/Sq mm	Shall not be less than 27 N/Sqmm

The result of the materials tested meets the standards and hence can be used for the work.
6th main 3rd cross Right side

SILICON CONSULTING ENGINEERS

Page No. 1/1,

SC/QC/110V-Y1/2021-22/FA1 Date: 23-02-2022

1. TESTING OF FINE AGGREGATES :

Sub: Testing of Fine Aggregates.

{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01).}

Ref.: Material testing/PMC/21-22,

Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

TABLE - 1.1 : SIEVE ANALYSIS :

IS Sieve Size,mm	Percentage Passing	Specification as Per IS: 383-1970(Reaffirmed 2002) Percentage Passing			Remarks
		Zone-I	Zone-II	Zone -II	
04.75	**98.15**	90-100	90-100	90-100	The Sample Conforms to Grading **Zone-II**
02.36	**81.45**	60-95	75-100	85-100	
01.18	**73.05**	30-70	55-90	75-100	
600. mic	**46.65**	15.34	35-59	60-79	
300.mic	**22.45**	5-20	8-30	12-40	
150.mic	**6.15**	0-10	0-10	0-10	

AE-2

TABLE 1.2 :

A.E.E

Sl No	Test Conducted	Sample	Results	Requirements as Per IS. Specification IS :383-1970 (Reaffirmed 2002)
1	Bulking of Sand	001	**17.63 %**	-----
2	Silt Content	----	**0.59%**	Not more than 8%
3	Specific Gravity	----	**2.61**	-------

The result of the materials tested meets the standards and hence can be used for the work.

10th main LHS W-E from Main Rd

AE-2

SILICON CONSULTING ENGINEERS

Page No. 1/1,

SC/QC/110V-Y1/2021-22/CB1 **Date: 03-03-2022**

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 07days Compressive Strength).
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01).}
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

AE-2

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M_{20}

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm^2	Maximum Load in K.N	Compressive Strength (N/mm^2)	Avg. Value
1	001	24-02-22	03-03-22	07	22500	370	16.44	16.67
	002	"	"	"	"	380	16.89	
	003	"	"	"	"	375	16.67	

The result of the materials tested meets the standards and hence can be used for the work.
Kenchenahalli, Synik Vihar Layout

AE-02

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SC/QC/110V-Y1/2021-22/CB6 Date: 07-03-2022

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 07days Compressive Strength).
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01).}
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

AE-2

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm
Grade of Concrete* : M_{20}

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm^2	Maximum Load in K.N	Compressive Strength (N/mm^2)	Avg. Value
1	001	28-02-22	07-03-22	07	22500	380	16.89	16.89
	002	"	"	"	"	370	16.44	
	003	"	"	"	"	390	17.33	

The result of the materials tested meets the standards and hence can be used for the work.
6th Main 6th Cross Dead End

AE-02

K.R

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SC/QC/110V-Y1/2021-22/CB9 Date: 09-03-2022

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 07days Compressive Strength).
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01).}
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

AE-2 AEE

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M_{20}

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm^2	Maximum Load in K.N	Compressive Strength (N/mm^2)	Avg. Value
1	001	02-03-22	09-03-22	07	22500	365	16.22	**16.30**
	002	"	"	"	"	360	16.00	
	003	"	"	"	"	375	16.67	

The result of the materials tested meets the standards and hence can be used for the work.
6th main 1st cross Left side

AE-02

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SC/QC/110V-Y1/2021-22/CB12 **Date: 11-03-2022**

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 07days Compressive Strength).
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01).}
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

AE-2

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm
Grade of Concrete* : M_{20}

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm^2	Maximum Load in K.N	Compressive Strength (N/mm^2)	Avg. Value
1	001	04-03-22	11-03-22	07	22500	375	16.67	**16.74**
	002	"	"	"	"	385	17.11	
	003	"	"	"	"	370	16.44	

The result of the materials tested meets the standards and hence can be used for the work.
6th main 5th cross Left side

AE-02

SILICON CONSULTING ENGINEERS

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SC/QC/110V-Y1/2021-22/CB15 Date: 12-03-2022

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 07days Compressive Strength).
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01).}
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

A&2
A.E.E

Dimensions of Specimen : 150 X 150 X 150mm
Grade of Concrete* : M_{20}

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm^2	Maximum Load in K.N	Compressive Strength (N/mm^2)	Avg. Value
1	001	05-03-22	12-03-22	07	22500	380	16.89	16.89
	002	"	"	"	"	370	16.44	
	003	"	"	"	"	390	17.33	

The result of the materials tested meets the standards and hence can be used for the work.
9th main RHS W-E from Main Rd

AE-02

SILICON CONSULTING ENGINEERS

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SC/QC/110V-Y1/2021-22/CB3A

Date: 25-03-2022

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 28days Compressive Strength).
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01).}
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

AE-2

AEE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M_{20}

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm^2	Maximum Load in K.N	Compressive Strength (N/mm^2)	Avg. Value
1	001	25-02-22	25-03-22	28	22500	525	23.33	22.96
	002	"	"	"	"	515	22.89	
	003	"	"	"	"	510	22.67	

The result of the materials tested meets the standards and hence can be used for the work.
Kenchenahalli, Synik Vihar Layout 9th main from 6th cross

AE-02

SILICON CONSULTING ENGINEERS

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SILICON
CONSULTING ENGINEERS

SC/QC/110V-Y1/2021-22/CB6A

Date: 28-03-2022

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 28days Compressive Strength).
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01).}
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

AE-2

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm
Grade of Concrete* : M_{20}

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm^2	Maximum Load in K.N	Compressive Strength (N/mm^2)	Avg. Value
1	001	28-02-22	28-03-22	28	22500	500	22.22	22.44
	002	"	"	"	"	510	22.67	
	003	"	"	"	"	505	22.44	

The result of the materials tested meets the standards and hence can be used for the work 6th main 4th cross Left side

AE-02

SILICON CONSULTING ENGINEERS

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SC/QC/110V-Y1/2021-22/CB1

Date: 15-03-2022

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 07days Compressive Strength).
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01).}
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE CUBE SPECIMENS

AE-2
AEE

Dimensions of Specimen : 150 X 150 X 150mm
Grade of Concrete* : M_{15}

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm^2	Maximum Load in K.N	Compressive Strength (N/mm^2)	Avg. Value
1	001	08-03-22	15-03-22	07	22500	310	13.78	13.70
	002	"	"	"	"	300	13.33	
	003	"	"	"	"	315	14.00	

The result of the materials tested meets the standards and hence can be used for the work.
Nagenahalli Layout Main Rd

AE-02

SILICON CONSULTING ENGINEERS

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SILICON
CONSULTING ENGINEERS

SC/QC/110V-Y1/2021-22/PB1 **Date: 07-03-2022**

TEST REPORT

Sub: Testing of Pre-cast Paver Blocks of thickness 60mm.
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01).}
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

Technical Reference*: IS 15658-2006.

AE-2

PHYSICAL TESTS ON PRECAST PAVER BLOCKS.

1.COMPRESSIVE STRENGTH:

Sl No	Identification	Compressive Strength, N/mm^2	Average Compressive Strength, N/mm^2
1	001	41.75	41.95
2	002	42.15	
3	003	41.35	
4	004	42.55	

The result of the materials tested meets the standards and hence can be used for the work Naidu Layout 7th Cross

AE-02

SILICON CONSULTING ENGINEERS

#S1317, 4th CROSS BEL 2nd STAGE BHARATH NAGAR ,BANGALORE – 560 091. CELL : 9448353883
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SC/QC/110V-Y1/2021-22/K4 Date: 08-03-2022

TEST REPORT

Sub: Testing of Pre-cast Material-Kerb Stones.
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01).}
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

1. PHYSICAL TESTS ON KERB STONES :

Sl No.	Identification	Flexural strength, fcr in N/sqmm	Characteristic Compressive Strength, fck in N/sqmm	Avg. Characteristic. Compressive Strength fck in N/sqmm	Remarks
1	001	3.28	21.94	22.63	As per Cl. 6.2.2 of IS 456- 2000, fcr=0.7√ fck
2	002	3.32	22.55		
3	003	3.38	23.40		

AE-2

2. WATER ABSORPTION TEST

AE-2

Sl No	Identification	Water absorption %	Average value %
1	001	4.93	4.86
2	002	4.76	
3	003	4.89	

The result of the materials tested meets the standards and hence can be used for the work
6th Main 6th Cross Dead End

AE-2

SILICON CONSULTING ENGINEERS

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SILICON
CONSULTING ENGINEERS

SC/QC/110V-Y1/2021-22/K7

Date: 11-03-2022

TEST REPORT

Sub: Testing of Pre-cast Material-Kerb Stones.
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01).}
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

1. PHYSICAL TESTS ON KERB STONES :

Sl No.	Identification	Flexural strength, fcr in N/sqmm	Characteristic Compressive Strength, fck in N/sqmm	Avg. Characteristic. Compressive Strength fck in N/sqmm	Remarks
1	001	3.38	23.45	23.18	As per Cl. 6.2.2 of IS 456- 2000, fcr=0.7√ fck
2	002	3.34	22.85		
3	003	3.37	23.25		

AE-2
AEE

2. WATER ABSORPTION TEST

Sl No	Identification	Water absorption %	Average value %
1	001	4.38	4.45
2	002	4.45	
3	003	4.53	

The result of the materials tested meets the standards and hence can be used for the work
6th main 2nd cross Left side

AEE

Page No. 1/1

SILICON CONSULTING ENGINEERS

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SC/QC/110V-Y1/2021-22/K10 Date: 16-03-2022

TEST REPORT

Sub: Testing of Pre-cast Material-Kerb Stones.
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01).}
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

1. PHYSICAL TESTS ON KERB STONES :

Sl No.	Identification	Flexural strength, fcr in N/sqmm	Characteristic Compressive Strength, fck in N/sqmm	Avg. Characteristic. Compressive Strength fck in N/sqmm	Remarks
1	001	3.37	23.25	23.20	As per Cl. 6.2.2 of IS 456- 2000, fcr=0.7√ fck
2	002	3.34	22.90		
3	003	3.38	23.45		

2. WATER ABSORPTION TEST

Sl No	Identification	Water absorption %	Average value %
1	001	4.59	4.55
2	002	4.45	
3	003	4.61	

The result of the materials tested meets the standards and hence can be used for the work
6th main 5th cross Right side

SILICON CONSULTING ENGINEERS

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SC/QC/110V-Y1/2021-22/K13 Date: 18-03-2022

TEST REPORT

Sub: Testing of Pre-cast Material-Kerb Stones.
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01).}
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

1. PHYSICAL TESTS ON KERB STONES :

Sl No.	Identification	Flexural strength, fcr in N/sqmm	Characteristic Compressive Strength, fck in N/sqmm	Avg. Characteristic. Compressive Strength fck in N/sqmm	Remarks
1	001	3.40	23.75	23.36	As per Cl. 6.2.2 of IS 456- 2000, fcr=0.7√ fck
2	002	3.34	22.95		
3	003	3.38	23.40		

AE2 AEE

2. WATER ABSORPTION TEST

Sl No	Identification	Water absorption %	Average value %
1	001	4.54	4.54
2	002	4.67	
3	003	4.43	

The result of the materials tested meets the standards and hence can be used for the work
10th main RHS E-W

AEE AE2

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SC/QC/110V-Y1/2021-22/GSB1 Date: 28-02-2022

TEST REPORT ON GRANULAR SUBBASE MIX
(GRADATION TEST)

Sub: To conduct tests on GSB (Grade-V) mix.
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01).}
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

TEST RESULTS

1. **Gradation Test:**

TABLE 1.1 AE-2

Sieve Size mm AEE	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Specified Limits as per MoRTH Specifications, V Revision-2013
75.00	100.00	100
53.00	98.45	80-100
26.50	83.60	55-90
9.50	54.10	35-65
4.75	45.05	25-50
2.36	17.25	10-20
0.85	8.55	2-10
0.425	3.45	0-5

The result of the materials tested meets the standards and hence can be used for the work
Surya Vamshi Layout 1st Cross Rd

AE-02

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Date: 02-03-2022

TABLE 1.2

SL No	Test conducted	Test Results	Tests Conforms to IS 2386(Part I to IV)– 1963 (Reaffirmed on 2002) & Requirements as per IS:383-1970 & M.o.R.T.H Specification, V Revision -2013.
1.	Water absorption, %	0.41 %	Not more than 2.0 %
2.	Liquid Limit, %	18.54	Not more than 25.0 %
3.	Plasticity Index, %	NP	Not more than 6.0 %
4.	Moisture Content, %	6.76	----------
5.	Aggregate Impact Value, %	28.89	Not more than 40.00 %

The result of the materials tested meets the standards and hence can be used for the work
2nd Cross Rd

AE

AE-02

A.E.E

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E-mail siliconcivilengineers@gmail.com

SC/QC/110V-Y1/2021-22/GSB3 Date: 02-03-2022

TEST REPORT ON GRANULAR SUBBASE MIX
(GRADATION TEST)

Sub: To conduct tests on GSB (Grade-V) mix.
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01).}
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

TEST RESULTS

1. **Gradation Test:**

TABLE 1.1

Sieve Size mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Specified Limits as per MoRTH Specifications, V Revision-2013
75.00	100.00	100
53.00	93.45	80-100
26.50	81.30	55-90
9.50	57.25	35-65
4.75	44.80	25-50
2.36	15.35	10-20
0.85	7.65	2-10
0.425	3.45	0-5

The result of the materials tested meets the standards and hence can be used for the work
3rd Cross Rd

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Date: 04-03-2022

TABLE 1.2

SL No	Test conducted	Test Results	Tests Conforms to IS 2386(Part I to IV)– 1963 (Reaffirmed on 2002) & Requirements as per IS:383-1970 & M.o.R.T.H Specification, V Revision -2013.
1.	Water absorption, %	**0.43 %**	Not more than 2.0 %
2.	Liquid Limit, %	**18.59**	Not more than 25.0 %
3.	Plasticity Index, %	**NP**	Not more than 6.0 %
4.	Moisture Content, %	**6.76**	----------
5.	Aggregate Impact Value, %	**28.63**	Not more than 40.00 %

The result of the materials tested meets the standards and hence can be used for the work 4th Cross Rd

A.E.E

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Date: 03-03-2022

TABLE 1.2

SL No	Test conducted	Test Results	Tests Conforms to IS 2386(Part I to IV)– 1963 (Reaffirmed on 2002) & Requirements as per IS:383-1970 & M.o.R.T.H Specification, V Revision -2013.
1.	Aggregate Impact Value	27.56%	Not more than 30.00 %
2.	Combined Flakiness and Elongation index, %	28.69 %	Not more than 35.0 %
3.	Water absorption, %	0.43 %	Not more than 2.0 %
4.	Plasticity Index, %	NP	Not more than 6.0 %

The result of the materials tested meets the standards and hence can be used for the work 2nd Cross Rd.

A.E.E

SILICON CONSULTING ENGINEERS

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SC/QC/110V-Y1/2021-22/W4 Date: 05-03-2022

TEST REPORT ON WET MIX MACADAM MIX
(GRADATION TEST)

Sub: To conduct Gradation test on Wet Mix Macadam (WMM) Mix.
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01).}
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

AE-2

TEST RESULTS

1. Gradation Test:
TABLE 1: A.E.E

Sieve Size mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Specified Limits as per MoRTH Specifications, V Revision-2013
53.00	100.00	100
45.00	97.45	95-100
26.50	—	-
22.40	73.15	60-80
11.20	52.25	40-60
4.75	36.90	25-40
2.36	23.05	15-30
0.600	19.25	8-22
0.075	3.50	0-5

The result of the materials tested meets the standards and hence can be used for the work
4th Cross Rd

AE-02

SILICON CONSULTING ENGINEERS K.R

#51317, 4th CROSS BEL 2nd STAGE BHARATH NAGAR ,BANGALORE – 560 091. CELL : 9448353883
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CONSULTING ENGINEERS

SC/QC/110V-Y1/2021-22/W5 Date: 07-03-2022

TEST REPORT ON WET MIX MACADAM MIX

(GRADATION TEST)

Sub: To conduct Gradation test on Wet Mix Macadam (WMM) Mix.

{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01).}

Ref.: Material testing/PMC/21-22,

Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

AE-2

TEST RESULTS

1. Gradation Test:

TABLE 1.1

Sieve Size mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Specified Limits as per MoRTH Specifications, V Revision-2013
53.00	100.00	100
45.00	97.15	95-100
26.50	---	-
22.40	74.35	60-80
11.20	56.80	40-60
4.75	31.55	25-40
2.36	24.35	15-30
0.600	18.90	8-22
0.075	3.55	0-5

The result of the materials tested meets the standards and hence can be used for the work

Opposite DS Max-Streak Appartment Rd

AE-02

SILICON CONSULTING ENGINEERS

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E-mail siliconcivilengineers@gmail.com

SC/QC/110V-Y1/2021-22/W7 Date: 08-03-2022

TEST REPORT ON WET MIX MACADAM MIX
(GRADATION TEST)

Sub: To conduct Gradation test on Wet Mix Macadam (WMM) Mix.
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01).}
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

AE-2

TEST RESULTS

1. Gradation Test:
TABLE 1.1

Sieve Size mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Specified Limits as per MoRTH Specifications, V Revision-2013
53.00	100.00	100
45.00	96.40	95-100
26.50	---	-
22.40	73.15	60-80
11.20	57.25	40-60
4.75	34.85	25-40
2.36	25.10	15-30
0.600	19.25	8-22
0.075	3.65	0-5

The result of the materials tested meets the standards and hence can be used for the work
Cross Rd Continued

AE-02

SILICON CONSULTING ENGINEERS

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E-mail siliconcivilengineers@gmail.com

Date: 09-03-2022

TABLE 1.2

SL No	Test conducted	Test Results	Tests Conforms to IS 2386(Part I to IV)– 1963 (Reaffirmed on 2002) & Requirements as per IS:383-1970 & M.o.R.T.H Specification, V Revision -2013.
1.	Aggregate Impact Value	26.71%	Not more than 30.00 %
2.	Combined Flakiness and Elongation index, %	28.56%	Not more than 35.0 %
3.	Water absorption, %	0.41 %	Not more than 2.0 %
4.	Plasticity Index, %	NP	Not more than 6.0 %

The result of the materials tested meets the standards and hence can be used for the work Synik Vihar Layout 6th Main 6th Cross Rd

AE-2

A.E.E

SILICON CONSULTING ENGINEERS

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Date: 11-03-2022

TABLE 1.2

SL No	Test conducted	Test Results	Tests Conforms to IS 2386(Part I to IV)– 1963 (Reaffirmed on 2002) & Requirements as per IS:383-1970 & M.o.R.T.H Specification, V Revision -2013.
1.	Aggregate Impact Value	27.96 %	Not more than 30.00 %
2.	Combined Flakiness and Elongation index, %	28.53 %	Not more than 35.0 %
3.	Water absorption, %	0.42 %	Not more than 2.0 %
4.	Plasticity Index, %	NP	Not more than 6.0 %

The result of the materials tested meets the standards and hence can be used for the work 10th Main.

AE-2

AE-02

A.E.E

SILICON CONSULTING ENGINEERS

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E-mail siliconcivilengineers@gmail.com

SC/QC/110V-Y1/2021-22/CD1 **Date: 08-03-2022**

1. TEST REPORT ON COARSE AGGREGATE:

Sub: Testing of Coarse Aggregate used in Dense Graded Bituminous Macadam.
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01).}
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

TABLE 1.1 ;

SL No	Test conducted	Test Results	Tests Conforms to IS 2386(Part I to IV)– 1963 (Reaffirmed on 2002) & Requirements as per IS:383-1970 & M.o.R.T.H Specification, V Revision -2013.
1.	Aggregate Impact Value	23.09%	Not more than 27.00 % for DBM
2.	Combined Flakiness and Elongation index, %	26.73%	Not more than 35.0 %
3.	Water absorption, %	0.42%	Not more than 2.0 %
4.	Specific gravity	2.62	-------
5.	Soundness	6.86 %	Max. 12 % in Sodium Sulphate

The result of the materials tested meets the standards and hence can be used for the work
Surya Vamshi Layout 1st Cross Rd

AE-02

A.E.E

Page No. 1/1,

SILICON CONSULTING ENGINEERS

SC/QC/110V-Y1/2021-22/DBM2

Date: 16-03-2022

1.TEST REPORT ON BITUMINOUS MIXES :

(BITUMEN EXTRACTION TEST & GRADATION TEST)

Sub: To determine the percentage of bitumen and gradation for DBM mix sample.
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01).}

Ref.: Material testing/PMC/21-22,

Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

AE-2

TEST RESULTS

A. Type of Construction : **Dense Graded Bituminous Macadam.**

1. The bitumen content obtained after subjecting the sample for Bitumen Extraction test = **4.53 %**

2. **Gradation Test**

TABLE 1.1

Sieve Size, mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Gradation requirement as per Table 500-10 of MORTH Specfications-2013 DBM (Grading - 2)
37.5	100	100
26.5	95.45	90-100
19.0	83.55	71-95
13.20	72.60	56-80
4.75	47.10	38-54
2.36	39.80	28-42
0.300	19.25	7-21
0.075	6.15	2-8

The result of the materials tested meets the standards and hence can be used for the work

4th Cross Rd

AE02

SILICON CONSULTING ENGINEERS

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CONSULTING ENGINEERS

SC/QC/110V-Y1/2021-22/DBM4 Date: 18-03-2022

1.TEST REPORT ON BITUMINOUS MIXES :
(BITUMEN EXTRACTION TEST & GRADATION TEST)

Sub: To determine the percentage of bitumen and gradation for DBM mix sample.
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01).}
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

AE-2

TEST RESULTS

A. Type of Construction : **Dense Graded Bituminous Macadam.**
1. The bitumen content obtained after subjecting the sample for Bitumen Extraction test = **4.53 %**

2. **Gradation Test**
TABLE 1.1

Sieve Size, mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Gradation requirement as per Table 500-10 of MORTH Specfications-2013 DBM (Grading - 2)
37.5	100	100
26.5	97.05	90-100
19.0	89.30	71-95
13.20	76.75	56-80
4.75	43.50	38-54
2.36	35.95	28-42
0.300	17.10	7-21
0.075	6.45	2-8

The result of the materials tested meets the standards and hence can be used for the work
Cross Rd Continued

AE-02

SILICON CONSULTING ENGINEERS K.C.R

#S1317, 4th CROSS BEL 2nd STAGE BHARATH NAGAR ,BANGALORE – 560 091. CELL : 9448353883
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SC/QC/110V-Y1/2021-22/DBM6 Date: 22-03-2022

1.TEST REPORT ON BITUMINOUS MIXES :
(BITUMEN EXTRACTION TEST & GRADATION TEST)

Sub: To determine the percentage of bitumen and gradation for DBM mix sample.
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01).}
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

AE-2

TEST RESULTS

A. Type of Construction : **Dense Graded Bituminous Macadam.**
1. The bitumen content obtained after subjecting the sample for Bitumen Extraction test = **4.54%**

2. **Gradation Test**
TABLE 1.1

Sieve Size, mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Gradation requirement as per Table 500-10 of MORTH Specfications-2013 DBM (Grading - 2)
37.5	**100**	100
26.5	**97.60**	90-100
19.0	**85.95**	71-95
13.20	**73.20**	56-80
4.75	**48.35**	38-54
2.36	**36.95**	28-42
0.300	**18.30**	7-21
0.075	**6.40**	2-8

The result of the materials tested meets the standards and hence can be used for the work
Naidu Layout 7th Cross Rd

AE-02

SILICON CONSULTING ENGINEERS

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CONSULTING ENGINEERS

SC/QC/110V-Y1/2021-22/BB1 Date: 14-03-2022

1. TEST REPORT ON BITUMEN SAMPLE:

Sub: Testing of Bitumen sample VG-30 Grade.
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01).}
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.
Technical Reference: Ministry of Road Transport and Highways, V Revision, 2013 and IS 73: 1992.

TABLE 1.1 ; AE-2

SL No	Details A.E.E	Test Results	Requirements as per I.S 73 –1992 Specifications
1.	Penetration at 25^0 C	51.30^0 C	Min. 45
2.	Ductility Value at 25^0 C	109.0 cm	40
3.	Flash point	236^0 C	Minimum 220^0 C
4.	Softening point	50.40^0 C	Min. 47

. The result of the materials tested meets the standards and hence can be used for the work
Surya Vamshi Layout 1st Cross Rd

AE-02

Page No. 1/1,

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SC/QC/110V-Y1/2021-22/BC2 **Date: 18-03-2022**

1.TEST REPORT ON BITUMINOUS MIXES :
(BITUMEN EXTRACTION TEST & GRADATION TEST)

Sub: To determine the percentage of bitumen and gradation for BC mix sample.
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01).}
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

AE-2

TEST RESULTS

A. Type of Construction : **Bituminous Concrete**
1. The bitumen content obtained after subjecting the sample for Bitumen Extraction test = **5.42%**

2. Gradation Test
TABLE 1.1

Sieve Size, mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Gradation requirement as per Table 500-17 of MORTH Specfications-2013 BC (Grading - 2)
19.0	100	100
13.2	96.25	90-100
9.5	83.10	70-88
4.75	65.45	53-71
2.36	54.80	42-58
1.18	43.70	34-48
0.600	32.50	26-38
0.300	21.60	18-28
0.150	18.25	12-20
0.075	6.40	4-10

The result of the materials tested meets the standards and hence can be used for the work 4th Cross Rd .

AE-02

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SC/QC/110V-Y1/2021-22/BS3

Date: 19-03-2022

1.TEST REPORT ON BITUMINOUS MIXES :
(STABILITY OF BITUMINOUS MIX)

Sub: To determine the stability of bituminous mix for BC mix sample.
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01).}
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

AE-2

TEST RESULTS

Table 1: Properties of BC (Gr-2) Mix

Sl. No.	Test Property	*Test results obtained by Marshall method	Requirements of Bituminous Concrete, Grade-2 as per M.o.R.T&H (V Revision)-2013 Specifications
1	Marshall Stability (75 blows) (At 60°C), kgs.	1356	900
2	Marshall Flow at 60°C, mm.	3.44	2.0 - 4.0

The result of the materials tested meets the standards and hence can be used for the work
Cross Rd Continued

AE-02

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SC/QC/110V-Y1/2021-22/BC4

Date: 23-03-2022

1.TEST REPORT ON BITUMINOUS MIXES :
(BITUMEN EXTRACTION TEST & GRADATION TEST)

Sub: To determine the percentage of bitumen and gradation for BC mix sample.
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01).}
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

AE-2

TEST RESULTS

A. Type of Construction : **Bituminous Concrete**
1. The bitumen content obtained after subjecting the sample for Bitumen Extraction test = **5.42 %**

2. **Gradation Test**
TABLE 1.1

Sieve Size, mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Gradation requirement as per Table 500-17 of MORTH Specfications-2013 BC (Grading - 2)
19.0	100	100
13.2	97.05	90-100
9.5	83.45	70-88
4.75	66.95	53-71
2.36	53.25	42-58
1.18	41.70	34-48
0.600	33.15	26-38
0.300	25.85	18-28
0.150	18.60	12-20
0.075	5.10	4-10

The result of the materials tested meets the standards and hence can be used for the work Synik Vihar Layout 6th Main 6th Cross Rd .

AE-02

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SC/QC/110V-Y1/2021-22/BS5

Date: 24-03-2022

1.TEST REPORT ON BITUMINOUS MIXES :
(STABILITY OF BITUMINOUS MIX)

Sub: To determine the stability of bituminous mix for BC mix sample.
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01).}
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

AE-2
A.E.E

TEST RESULTS

Table 1: Properties of BC (Gr-2) Mix

Sl. No.	Test Property	*Test results obtained by Marshall method	Requirements of Bituminous Concrete, Grade-2 as per M.o.R.T&H (V Revision)-2013 Specifications
1	Marshall Stability (75 blows) (At 60°C), kgs.	1350	900
2	Marshall Flow at 60°C, mm.	3.46	2.0 - 4.0

The result of the materials tested meets the standards and hence can be used for the work
10th Main

AE-02

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SC/QC/110V-Y1/2021-22/D2

Date: 04-03-2022

TEST REPORT ON DRY LEAN CONCRETE

(GRADATION TEST)

Sub: To conduct Gradation test on Dry Lean Concrete (DLC) Mix.
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01).}
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

AE-2

TEST RESULTS

1. Gradation Test:
TABLE 1.1

Sieve Size mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Specified Limits as per MoRTH Specifications, V Revision-2013
26.50	100	100
19.00	89.45	75-95
9.50	63.15	50-70
4.75	49.25	30-55
2.36	36.80	17-42
0.600	19.30	8-22
0.300	14.05	7-17
0.150	10.90	2-12
0.075	8.25	0-10

The result of the materials tested meets the standards and hence can be used for the work
5th Phase 1st A cross

AE-02

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SC/QC/110V-Y1/2021-22/CR1

Date: 14-03-2022

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 07days Compressive Strength).
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01).}
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

AE-2

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M_{30}

A.E.E

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm^2	Maximum Load in K.N	Compressive Strength (N/mm^2)	Avg. Value
1	001	07-03-22	14-03-22	07	22500	515	22.89	**23.41**
	002	"	"	"	"	540	24.00	
	003	"	"	"	"	525	23.33	

The result of the materials tested meets the standards and hence can be used for the work 5th Phase 1st A cross

AE-02

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SC/QC/110V-Y1/2021-22/CR2

Date: 16-03-2022

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 07days Compressive Strength).
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01).}
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm
Grade of Concrete* : M_{30}

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm^2	Maximum Load in K.N	Compressive Strength (N/mm^2)	Avg. Value
1	001	09-03-22	16-03-22	07	22500	530	23.56	**23.70**
	002	"	"	"	"	525	23.33	
	003	"	"	"	"	545	24.22	

The result of the materials tested meets the standards and hence can be used for the work
1st B cross

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SC/QC/110V-Y1/2021-22/CR3

Date: 17-03-2022

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 07days Compressive Strength).
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01).}
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M_{30}

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm^2	Maximum Load in K.N	Compressive Strength (N/mm^2)	Avg. Value
1	001	10-03-22	17-03-22	07	22500	530	23.56	23.33
	002	"	"	"	"	530	23.56	
	003	"	"	"	"	515	22.89	

The result of the materials tested meets the standards and hence can be used for the work
1st D cross

AE-02

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CONSULTING ENGINEERS

SC/QC/110V-Y1/2021-22/CR4

Date: 21-03-2022

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 07days Compressive Strength).
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01).}
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm
Grade of Concrete* : M_{30}

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm^2	Maximum Load in K.N	Compressive Strength (N/mm^2)	Avg. Value
1	001	14-03-22	21-03-22	07	22500	530	23.56	23.48
	002	"	"	"	"	520	23.11	
	003	"	"	"	"	535	23.78	

The result of the materials tested meets the standards and hence can be used for the work
Synik Vihar Layout 6th Main 6th Cross Left side Rd

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